



# Hydrometrics, Inc.

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1069566 - R8 SDMS

2727 Airport Road  
Helena, MT 59601  
**(406) 443-4150**  
Fax: (406) 443-4155 or  
(406) 443-1252  
www.hydrometrics.com

October 31, 1997

Ms. Gwen Jacobs  
U.S. Environmental Protection Agency  
Region VIII, MT Operations  
Federal Building  
301 South Park  
Drawer 10096  
Helena, MT 59626-0026

ENVIRONMENTAL  
PROTECTION AGENCY

NOV 5 1997

MONTANA OFFICE

RE: Asarco East Helena Smelter - Revised Sewage Treatment Plant Sludge Disposal Plan

Dear Ms. Jacobs:

Asarco, in coordination with Hydrometrics, had previously submitted a Sludge Disposal Plan to you on September 30, 1997 for the proposed packaged sewage treatment plant (STP) at the East Helena plant. This letter is a revision and replacement of that plan.

As you may recall, the two primary options in the September 30th disposal plan were to either transfer the STP sludge to the City of Helena's POTW or perform land application disposal techniques. In light of the strict local pretreatment limits the City of Helena has imposed on its industrial users, it appears that Asarco's sludge may not pass the local limits and will not be managed by the City of Helena. In addition, due to the land disposal requirements of 40 CFR 503, namely the winter and pathogen reduction and stabilization storage requirements, Asarco has chosen not to pursue this disposal option either.

Instead, a recessed plate and frame filter press is anticipated to be installed at the STP. The sludge will be conditioned with flocculent and lime prior filtering to increase the percent solids content of the filter cake. Filter cake from the initial runs of the filter press will be tested for toxicity and final disposal of the sludge will be dependent on these results and Asarco's internal acceptance criteria.

This Sludge Disposal Plan is divided into two groups of disposal options. The first group assumes the sludge will pass Toxicity Characteristic Leaching Procedure (TCLP) analysis criteria and consists of two viable options for sludge disposal. The second group of options assumes the sludge does not pass TCLP analysis criteria and also consists of two viable options.

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**Group 1: Disposal Options if STP Sludge Passes TCLP Criteria**

1. Dewater and Disposal at Lewis and Clark County Landfill. The Lewis and Clark County landfill will accept the waste if it passes the Toxicity Characteristic Leaching Procedure (TCLP) and the paint filter test. Once the sludge has been dewatered and passes the paint filter test, it would be transported to the Lewis and Clark County landfill for disposal.
2. Dewater and Disposal in Smelter Circuit. Due to internal acceptance criteria for both chemical make up and biological hazards at the Asarco East Helena Smelter, on-site disposal may be considered to be the least favorable alternative. If the sludge filter cake passes internal acceptance criteria, it could be managed within the smelter circuit.

**Group 2: Disposal Options if STP Sludge Fails TCLP Criteria**

1. Disposal in Smelter Circuit. If the sludge fails TCLP criteria but passes Asarco's internal acceptance criteria for both chemical make up and biological hazards, the sludge could be taken into the Asarco smelter circuit for disposal as discussed above.
2. Disposal as a RCRA Hazardous Waste. If the sludge filter cake fails TCLP criteria and fails Asarco's internal acceptance criteria, the sludge will be managed and disposed of as a RCRA hazardous waste in accordance with applicable local, state and federal laws.

Based on current sanitary sewer water samples, it is assumed that the STP sludge will pass the TCLP criteria, however, the STP will need to be in place and operational before a sludge sample can be collected for analysis.

I will be contacting you by November 14, 1997 for your approval of this plan. In the meantime, if you have any questions concerning this issue please contact me at 443-4150, ext. 153.

Sincerely,



Daniel E. March, P.E.  
Project Manager

c: Paul Lavigne, DEQ  
John Shaw, Asarco  
John Cavanaugh, Asarco  
Rich Marcus, Asarco  
Bob Braico, Hydrometrics